XII. *An Account of a remarkable Tide at* Briſtol: *In a Letter to the Rev.* Thomas Birch, *D. D. Secret. R. S. from the Rev.* Joſiah Tucker, *D. D. Dean of* Glouceſter.

Read Feb. 23, 1764.

ON Saturday the 11th inſtant, when the tide had hardly begun to flow, according to it's regular courſe, it was obſerved, by the water-bailif of the city, and by ſeveral others, both on the back, and at the key, to riſe very ſuddenly to almoſt high-water mark; and it ſo continued for near half an hour: then it ſunk, almoſt inſtantaneouſly, three feet perpendicular: after that, it began to flow in again, and kept flowing on till one of the clock, and roſe to the height it was expected to do.

At Rownham Paſſage, a mile below the city, the ferry-men obſerved the tide to ebb almoſt inſtantaneouſly, and to ſink at leaſt four feet perpendicular. Then it flowed in again, as it ſhould have regularly done.

At King-Road, which is about three miles below the city, the officers obſerved the king's boat to float ſuddenly, which they attributed to a great freſh comming. But they found afterwards the boat preſently aground.

I could get no intelligence of any thing obſervable, that happened in the river Severn, excepting that at Glouceſter, and at Worceſter, the inundation ſunk very

very faſt on that day. But moſt undoubtedly the ſtrong rapid tide of the Severn muſt have been affected in a very remarkable manner, had there been any curious perſons to take notice of it.

XIII. *A Letter containing ſome Experiments in Electricity, to Mr.* Benjamin Wilſon, *F. R. S. from Mr.* Torbern Bergman, *of* Upſal, *in* Sweden.

Ampliſſime atque celeberrime domine,

Read Feb. 23, 1764. EXperimentorum circa corporum adfrictum jam ea ſunt commemoranda, quæ cum ſerico inſtitui; cujus vis electrica, etſi a domino Gray dudum inventa, tamen hucuſque parum fuit explorata. Pulchra ſunt quæ adtulit dominus Symmer; ſed non ſufficientia. Ne vero longa narratione variorum tentaminum charta impleatur; palmaria tantum, et e quibus reliqua intelligi poſſunt, adferam. Nova ligamenta ſericea, unum circiter pollicem geometricum Suecanum lata, adhibui. Alterum extremitatibus fixum et bene tenſum, quod in poſterum *fricatum* voco, alterum vero ſeu *fricans* manibus, quantum ſatis, expando, ſuper eodem ſpatio fricati pluries duco reducoque perpendiculariter ad ejus longitudinem. Hanc operationem *tranſverſam* adpello: eam vero qua idem ſpatium fricantis ducitur antrorſum retrorſumque, ſuper tota longitudine fricati, *ſecundum longitudinem* fieri dico.

Si